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SOCIAL MEDIA IN EDUCATION AND SUSTAINABILITY IN CYBERSECURITY: A GEOGRAPHICAL ENQUIRY INTO EMERGING TRENDS AND MITIGATION MEASURES IN PALAM COLONY, NCT DELHI

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Abstract : Disasters, both natural and digital, loom unpredictably, presenting formidable challenges. They can occur anywhere; some, like earthquakes, are particularly unpredictable. While agencies like NIDM and NDMA were established in India to tackle such crises, the focus remains on disaster management research and policy formulation. This involves a collaborative effort, drawing on the strengths of people, media, and government bodies. In this landscape, social media emerges as a powerful ally, bridging the gap between public and emergency services with real-time updates and widespread connectivity. Its educational potential is vast, enabling teachers to reach students beyond the confines of the classroom and providing a wealth of resources. Yet, the flip side of this digital coin reveals a darker truth – the potential for cybercrime to flourish amidst unchecked misuse. As the digital realm expands, so does the urgency for sustainable cybersecurity measures. Our study homes in Delhi, the epitome of a cyber-city, conducted a meticulous survey in the Palam district. Here, we delve into the nexus between social media, education, and cybersecurity, unearthing insights that pave the way for a safer digital future. The findings of our research resonate with a clarion call for action – sustainable strategies to fortify cybersecurity and stem the tide of cybercrime. It's a call to arms in the digital age, where the stakes are high, and the need for resilience paramount.
Keywords: Social Media, Sustainability, Cybercrime, Education, Cybersecurity, Delhi, Palam.

1. INTRODUCTION

Social media has become a global phenomenon, catering to diverse age groups based on their interests. This digital technology serves as a modern conduit for social interaction and staying informed. Despite physical distances, social media bridges the gap, fostering connections among individuals worldwide. Its impact is profound, diminishing feelings of isolation, fostering connections with like-minded individuals, and fostering an appreciation for diverse perspectives. With myriad platforms such as blogs, social networking sites, instant messaging, and photo/video sharing platforms, social media offers a plethora of avenues for engagement. Each platform holds its significance, catering to varying interests and preferences. Through these platforms, individuals form communities, enabling communication with millions across the globe on a single unified platform. Social media's influence transcends boundaries, shaping the way we connect, communicate, and engage with the world.

1.1 Social Media and Education: An Inter-connection

Social media is a computer-based technology with a user interface that connects different domains of life like political, social, digital, educational, scientific, economic and environmental. People use social media to connect and share their thoughts through this digital platform. In the field of education, social media has proven to be a great boon as it helps students to improve their study skills and techniques by enhancing the learning opportunities for them. There are a variety of e-learning platforms like Unacademic, Biju's, etc. which provide live e-learning sessions to students especially proving beneficial to those who are not able to go to schools or educational institutes. They can study in distant mode with the help of such platforms and continue their study. They can also attend and tune in to the recorded sessions at their convenience. Apart from distance education, even for regular curriculum also, social media proves to be beneficial. For example, teachers can communicate with their students through social media to clear their doubts and queries without waiting for regular fixed school hours. It provides a relaxation of time for both students and teachers. As it is helpful in teaching and learning its demand is increasing daily all over the world.

1.2 Social Media in India

In India, a large number of people are connected with social networking sites and it has increased their convenience in communication and e-learning. People use smart devices like smartphones, laptops, tablets, etc. as a means and networking, thus, becomes very easy and essential for them.

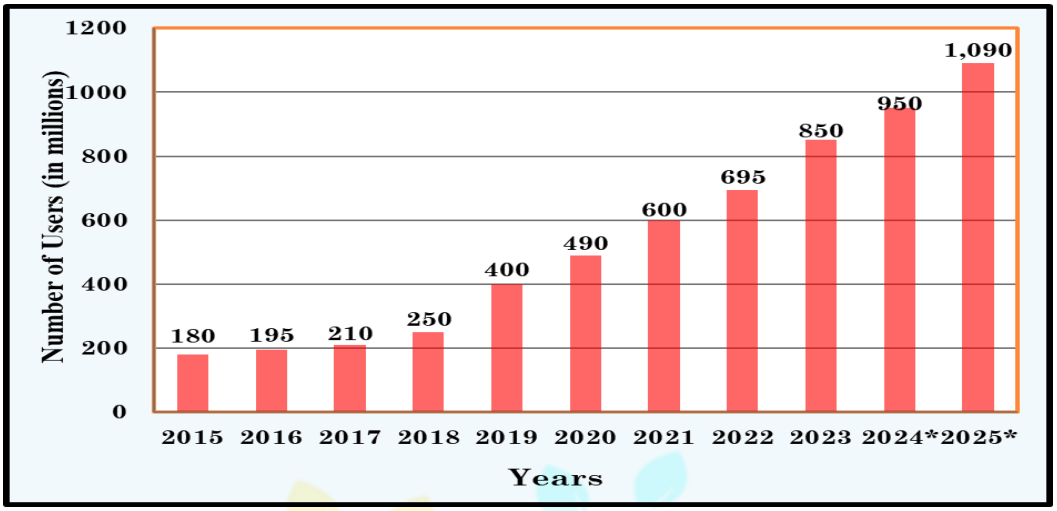

Figure 1: Social Network Users Penetration in India (2015-2025*)

Source: Statista (2023)

*Provisional Data from 2021-2025

Figure 1 depicts the increasing trend in the number of social media users in India from 2015 with a future forecast for the year 2025*. In 2015, there were about 180 million people that were connected through social media which later on increased to 490 million people in 2020 and according to the recent data available (Statista, 2023), it has reached 850 million people in 2023. It is further expected that by 2025, it will increase to 1,090 million people. Indian population is the second largest in the world with about 1428.6 million people, according to Census 2011. The users of social media in India are also higher in numbers than in other countries and reflect an increasing pattern with every passing year.

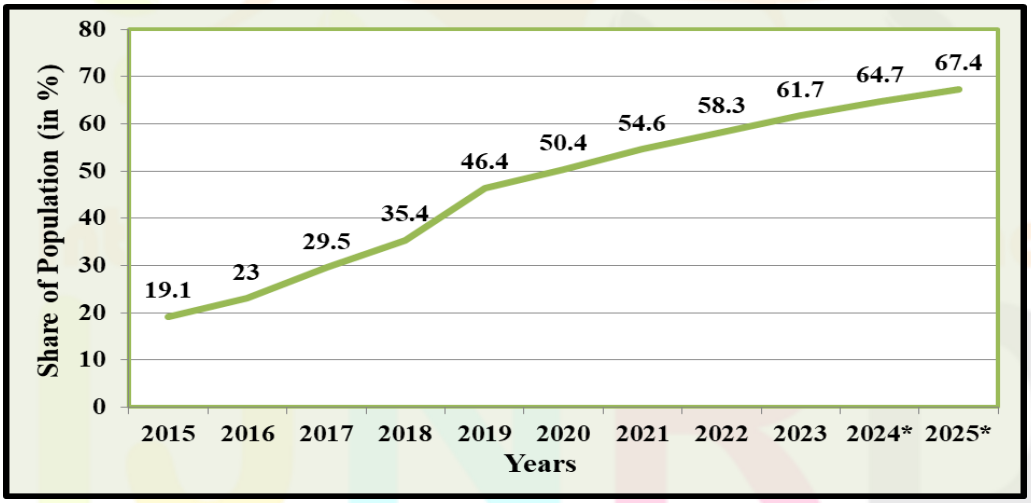

Figure 2: Share of Indian Population in Social Media Usage (2015-2025*)

Source: Statista (2023)

*Provisional Data from 2021-2025

Figure 2 deciphers the share of the Indian population that is engaged on social media sites. The graph depicts an increasing and deep penetration of social media platforms among the Indian masses. In 2015, about 19.1% of the Indian population was connected through social media which later increased to 50.4% in 2020 and according to the recent data (see figure 2) it is estimated to be 61.7% in 2024. It is expected that by 2025, it will reach to an all-time high of 67.4%.

1.3 Social Media in Sustainable Disaster Management in India

With time, social media has widened its range and now it has unfurled introduced its benefits and established its vital role in sustainable disaster management. A disaster is an unpredictable event when a hazardous situation gets out of control and leads to large-scale devastations in the form of causalities, loss of life, damage to property, environmental degradation and paralyzing the entire economy. We need to manage such disasters sustainably and efforts should be taken to reduce its long-term effects both on the people and their property. Disaster management intends to reduce the potential losses from any hazard and helps in achieving active and effective recovery. It has to be done in 5 stages namely-

Figure 3: Stages of Disaster Management

Source: Self-Prepared by Author (2023) based on Concepts Derived

Figure 3 represents the five stages of disaster management in which the role of social media is significant. Social media can help in prevention by informing us about possible chances of any disaster before it becomes difficult to control. Through its large connections and wider coverage more people will be informed in less time. Social media helps in mitigation and preparedness and provides the latest updates, road closure updates, evacuation routes, shelter locations, etc. as mitigation measures. It also helps in responding towards any disaster and in providing and mapping better sustainable recovery solutions.

1.4 Cybersecurity: A Sustainable Solution to Human-induced Disaster-Cybercrime

Disasters can be natural or man-made. Those disasters that occur without any human interference are natural disasters like earthquakes, floods, etc. and those that occur because of human negligence and interference are human-made disasters. One of the leading human-induced disasters is the cybercrime. Cybercrime relates to the illegal activities of humans involving computers, networks, or networking devices for criminal activities. Its increasing pattern can be witnessed on a large scale in India.

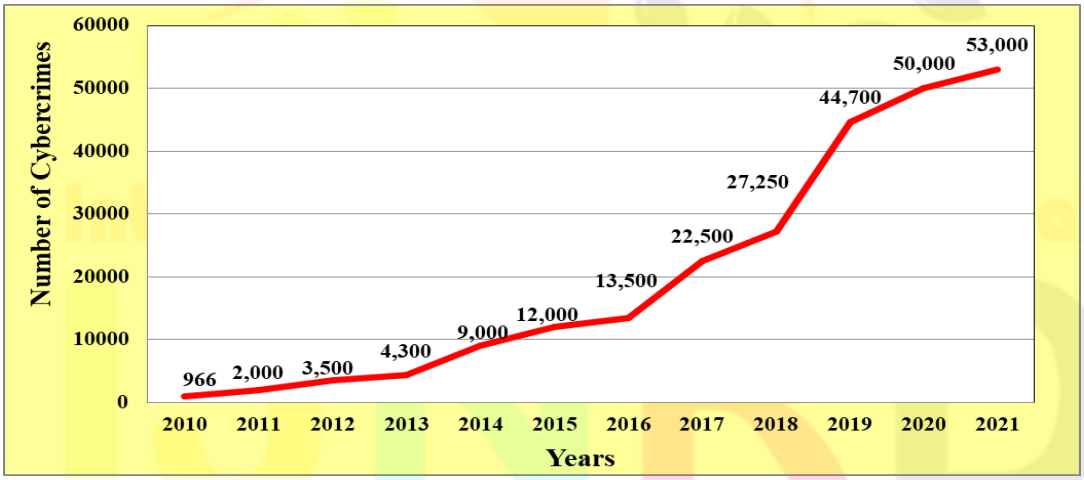

Figure 4: Cyber Crime surges, Emerging trends in India (2010-2021)

Source: National Crime Records Bureau of India (2023)

*Provisional Data for 2021

Figure 4 attempts to explore the pattern of emerging trends in cybercrimes reported in India from 2010 to 2021. Cybercrime broadly refers to such activities of humans that are unlawful and criminal with the aid of networks, computers and digital technology. These human-induced unlawful activities have affected a large portion of India's population; mostly illiterate and ignorant. 966 cases of cybercrimes were reported in India in 2010 which increased to 2000 cases in next one year in 2011. Since then, the trend witnessed rapid growth in the number of cases and reached 13,500 in the next 5 years i.e. in 2016. The cybercrime rates further rose to a record level of 53,000 registering a growth rate of almost 400% in 2021 during a decade.

To deal with this heinous act of cybercrime; cybersecurity is introduced. The task is to make digital technology (in the era of digitalization) sustainable and less harmful for better future achievements and advancements. In financial terms and business perspective, it is beneficial to have robust cybersecurity, when it comes to ensuring the sustainability of any company that wishes to work for longer intervals of time. In the absence of secure cyberspace, it increases the hurdles in achieving the objectives of sustainable development. The educational sector in India is no exception to this. Such kinds of user-interface-based human disasters are increasing at the Pan-India level and call for an immediate action-oriented sustainable management plan.

1.5 Cybersecurity and Sustainable Disaster Management in Delhi

Delhi is a cyber-city and digital crimes like cybercrimes are very easy to perform here. In the past decade, the number of cybercrime cases increased exponentially in Delhi and most people don't even know how to deal with this disaster. To sustainably manage these types of crime, social media has proven to be of great use. Social media has a wider range of communication which helps in communicating with a large population of Delhi NCT which is 16.8 million (According to 2011) within a few minutes. People are involved in different social media platforms like WhatsApp, Facebook, Twitter, LinkedIn, etc. These platforms allow them to make connections, be updated, get jobs, etc. In disaster situations, it helps in building situational awareness, understanding the needs of the victims/survivors, saving lives through rapid communication, and fostering transparency and accountability. Victims share their past experiences, and it helps other people not get fooled like them.

The cybercrime trend is increasing, and it needs to be controlled and managed. Social media is one of the best digital ways to manage such disasters smartly through its different platforms. It is important to provide safety and security to personal data and also to reduce cybercrime. To increase the security of digital devices, cybersecurity has been introduced among people. Cybersecurity needs to be sustainable as it'll help in achieving the objectives of sustainable development goals. According to SDG 9, this aims at Industry, Innovation and Infrastructure. This goal focuses on building resilient infrastructure, promoting inclusive & sustainable industrialisation and fostering innovation, which will require central attention on cybersecurity.

2. CONCEPTUAL FRAMEWORK

The researcher attempted to explain the terms used in this research paper for social media in disaster management and cybercrime. The most used terms are given below which the detailed explanations and conceptions.

Figure 5: Conceptual Terms Used

Source: Self-Prepared by Author (2023) based on Concepts Derived

- **Networking:** It is an informal social setting that is used to share information about different things with different people, belonging to different backgrounds.
- **Social media platforms:** These platforms are digital and help people socialize by leveraging social networks.
- **Cybersecurity:** This term defines the security that defends electronic devices like computers, laptops etc. from malicious attacks.
- **Disaster management:** It is a process of process or comprehensive approach that helps in preventing disasters and dealing with them.
- **Disaster management cycle:** It is a cyclic process that helps in disaster management. It consists of 5 sub-processes prevention, preparedness, mitigation, response, and recovery.
- **Prevention:** It is a part of the disaster management cycle, to minimise the effects of future disasters.
- **Preparedness:** It is a part of the disaster management cycle, to prepare for managing the crisis.
- **Mitigation:** It is a part of the disaster management cycle, to lessen the impact of current disasters by helping the victims.
- **Response:** It is a part of the disaster management cycle, to save lives and minimize immediate impacts.
- **Recovery:** It is a part of the disaster management cycle, to restore activities and services.
- **Sustainability:** It is a social aim for people to co-exist on the earth for a longer period.
- **Sustainable development:** The development in which we fulfil the needs of the present generation without compromising the ability of future generations to meet their own needs.

- **Cybercrime:** It is the type of digital crime that can harm the privacy and financial security of an individual or a company with the help of digital tools like computers, smartphones etc. and networks.

3. RESEARCH FOCUS DELHI'S PALAM COLONY CYBER LANDSCAPE

Delhi, the national capital of India, serves as the administrative heart of the nation and a pivotal hub for political and social activities. Geographically, the Delhi National Capital Territory (NCT) spans from 28°36'36" N to 77°13'48" E, covering an area of 1,484 square kilometres (refer to Figure 6a). Palam Colony, located at 28°35'21" N and 77°5'9" E, occupies 510.61 square kilometres (refer to figure 6b) in the southern part of Delhi within the South West district.

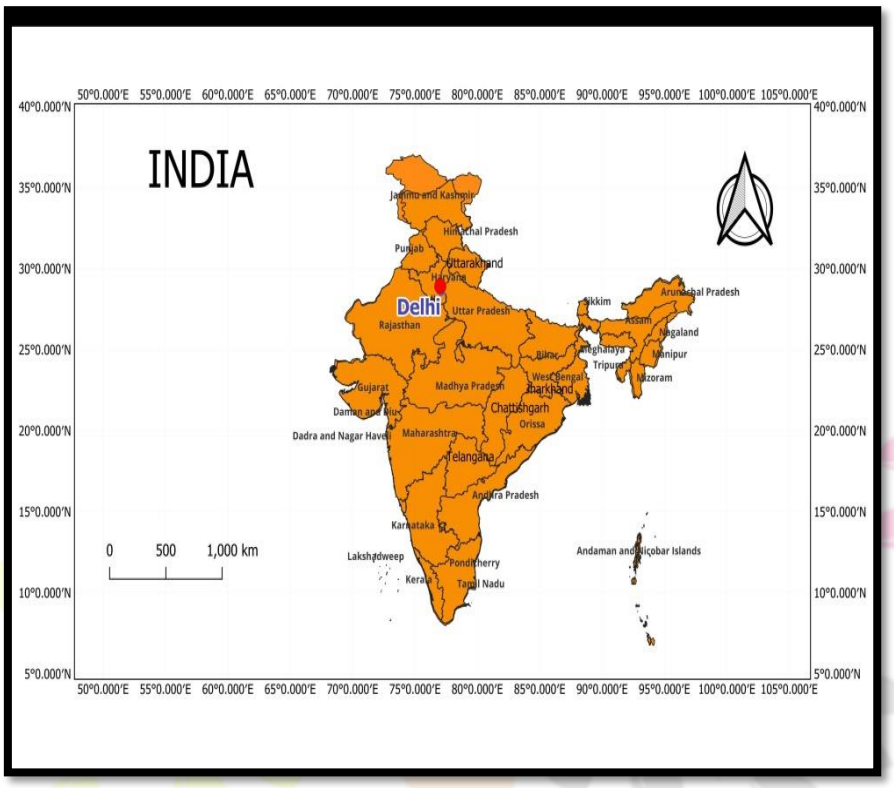

Figure 6a: Geographically location of Delhi NCT in India

Source: Prepared using QGIS (2023)

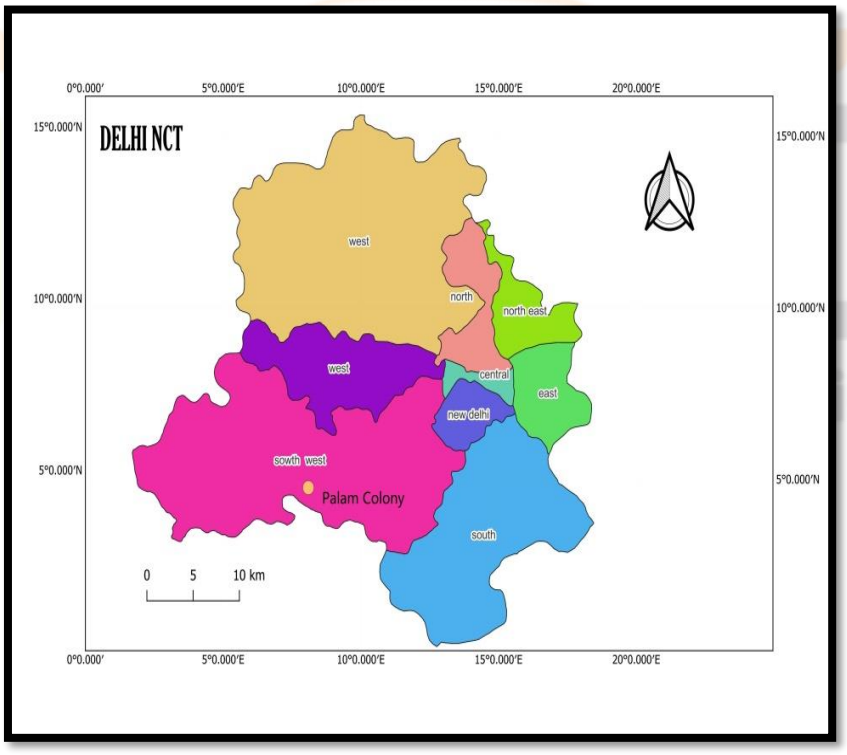

Figure 6b: Location of Palam in Delhi NCT

Source: Prepared using QGIS (2023)

As one of the 70 Vidhan Sabha constituencies in Delhi NCT, Palam is situated 20 km southwest of New Delhi City Centre. The area is divided into two sub-divisions: Raj Nagar (further split into Raj Nagar Part 1 and Part 2) and Sadh Nagar (split into Sadh Nagar Part 1 and Part 2). Palam is renowned for its Khap Panchayat and is part of the Southwest Delhi district, one of Delhi's nine districts. It is a densely populated area, attracting people seeking employment, educational opportunities, and healthcare facilities.

4. REVIEW OF LITERATURE

Goswami et al. (2023) are concerned about the role of sustainable development in cyber security. He discussed that sustainable digitization is a growing trend in which digital technology is used to promote environmental, social and economic sustainability. His paper examined the various risks associated with cyber security, such as privacy violations and data breaches, and highlights the need for flexible cyber security policies and regulations that can adapt to the rapidly changing digital landscape. He provided a valuable resource for policymakers, researchers, and practitioners in the field of cybersecurity of integrating cybersecurity into sustainable development.

Jamicke et al. (2020) viewed the exponential growth of Internet-of-Things (IoT) devices and their applications in a variety of smart devices ranging from previous health, smart cities and industry. He talked about the sustainable use of smart devices and showed the increasing trends in sustainability. He first introduced the concept of sustainable IoT and analyzed it from two different angles circular economy and cybersecurity. He gave preventive measures regarding sustainability.

John & Bayonle (2023) explained that rapid digitalization and society's interconnection have provided both opportunities and problems for sustainable development. He aimed to understand how cybersecurity measures might help achieve sustainable development goals. He emphasized the critical importance of recognizing the interdependence between cybersecurity and sustainable development by mapping cybersecurity with the SDGs so, societies can harness the transformative power of digital technologies to build a secure, inclusive and sustainable future for all.

Bold & Yadamsunren (2019) said that social media is a potential tool to enhance the delivery and quality of education in a country, such as Mongolia, which is characterized by vast territory, sparsely distributed population and relatively poor fixed technology infrastructure. His exploratory study aimed to assess the use of social media in Mongolia higher education, as perceived through interviews with 25 university educators in individual and group settings. He found the pros and cons of using social media as a potential tool in the academic environment. His study provided insight into the use of social media as an educational tool in Mongolia.

Khan et al. (2017) explained the impact of social media on teachers' performance in higher educational institutions in Pakistan. He explored that social media has a significant impact on teacher's performance. His main purpose is to understand the nature of social media and to how much extent social media is playing its role in the development of faculty performance.
Samarasinghe and Chandrasin (2019) opined that the Internet, telecommunication and social media have become an integral part of our daily life. It facilitates interaction among people by sharing information regardless of the location and time barriers. The use of social media has gradually changed and impacted every aspect of society. His objective was to study and examine the impact of social media on students and academic performance multi-dimensional Technology Acceptance Model.

Kafol & Bregar (2017) addressed the question of whether it is possible to create a single methodology covering as many aspects as necessary to protect organizations' assets against known and possibly developing types of cyberattacks. He talked about the cyber usage and applications that created vulnerability to attacks from anywhere in the world. It is therefore necessary to devise protection against cyber-attacks.

Chaturvedi et.al (2020) discussed that the infrastructure to protect the evolving ICT infrastructure in modern information society does not need any emphasis. ICT infrastructure was the thread through which all critical national infrastructure was woven together. He attempted to present a snapshot of the intrusive, likely and imperatives that emerge from this study in the Indian context.

Obasi et.al (2024) investigated the pivotal role of cybersecurity in bolstering environment protection and sustainable development, a critical yet underexplored nexus in contemporary research. He concluded that the integration of robust cybersecurity measures is paramount in the pursuit of sustainable development goals, calling for ongoing vigilance, innovation and opportunities. He said that the critical intersection of cybersecurity and sustainability offers a foundation for further studies and strategic initiatives aimed at securing sustainable development in the digital age.

Sharma & Soundarabai (2017) discussed that social media is a platform where people socialize virtually including Facebook, WhatsApp, Twitter, Quora, Linked In, YouTube, and many more. He showed the impact of social media all over the world and talked about the impact of social media on women, children and senior citizens. He analyzed the impact and suggested some preventive measures to overcome these vulnerable situations.

Most of the literature reviewed above does not explain the negative impact of social media on education properly. Moreover, they failed to analyze the existing social media and their role in mitigation and preparedness against cybercrimes in long-lasting measures or durable solutions. In addition to this, no sound measures have been provided to tackle cybercrime-related issues and ways through which one can identify which information is true on social media and which is not. Also, no sustainable solution is suggested to sustain cybersecurity in the context of spreading academic information across the world. No study was found focusing on the role of social media in disaster management.

5. AIMS AND OBJECTIVES

a) To explore the role of social media in education and academic areas.
b) To understand the trends in cybercrimes in India.
c) To examine the level of awareness among the respondents about cyber threats and sustainable cybersecurity
d) To evaluate the impacts of cybercrime on society and in metropolitan cities.
e) To analyse the role of cybersecurity as a tool in sustainable mitigations and preparedness.

6. MATERIALS REQUIRED AND METHODOLOGY

6.1 Data Collection Sources

The study draws its data collection from both primary and secondary sources.

Primary Data: Data which is collected through the survey is known as Primary Data. In this Data, we gather information related to the awareness level, knowledge about cybercrime and awareness among respondents. It includes:

a) **Observation:** In observation, the data is collected by observing the respondents in the study area. This method implies observing the behaviour pattern of respondents to collect the information.
b) **Interviews:** During the process of conducting interviews with the respondents, questions were asked related to personal details like gender, age, educational, educational qualifications, nature of working class, sector in which the respondents are employed, knowledge about cybercrime and social media awareness.
c) **Structured Questionnaire:** While conducting a survey, a decision was made on some structured questions like one-word or multiple-option-type questions, yes or no. Respondents answered our questions with patience and gratitude. The entire questionnaire was divided into 4 parts. The first part dealt with personal details, the second part focussed on testing the knowledge of respondents related to social media and disaster management of cyber-crime. The third segment of the questionnaire intended to check respondents' awareness level concerning new programs, apps, and policies related to disaster management. The fourth and last part of the questionnaire was intentionally kept open intended to provide a chance for the respondents to share their opinions and suggestions about the management of cybercrime and social media modern uses. A total of 200 responses were collected from the study area with varying opinions and viewpoints regarding cybercrime.

Secondary Data: Secondary sources of data that we use are: The National Crime Records Bureau (NCRB), Statista, and Census of India (2011).

6.2 Methodology

A simple Radom sampling method was used to collect the samples. Males and females were randomly selected to answer the questionnaires from three age groups: Children (1-15 years), working-class adults (15-60), and senior citizens (60 years and above). Each individual had a study area. A total of 500 samples were collected.

The collected data were classified and arranged into tables for further analysis. Various cartographic techniques, Such as pie charts depicting gender ratio and the percentage of social media platforms in disaster mitigation and graphs, were employed for result analysis. QGIS 3.30.1 software was used to create maps for the study area.

7. RESULTS AND DISCUSSION

Results and discussion are divided into many parts. We discussed about personal details for example age, educational qualification, gender, name etc. We discussed the knowledge-related questions of cybercrime, social media etc. In the questionnaire, we discussed the awareness level related to cybercrime and social media, solutions to sustainable cybersecurity and suggested some preventive measures.

7.1 Participants Information

Palam is a most populous and well-settled colony. Different age groups of people live there which have different types of occupations, colours, cast and creed. Most of the people live with their families. Some live alone because they live here for education. Those people who lived here for more than 10 years had their own house. Those people who lived alone mostly lived on rent. A total of 500 respondents were surveyed. People of different age groups participated. Around 70% of people are working class and the rest are children and the elderly. Every person belongs to a different educational background and works in different fields. Around 40% of males and 60% of females participated in this survey.

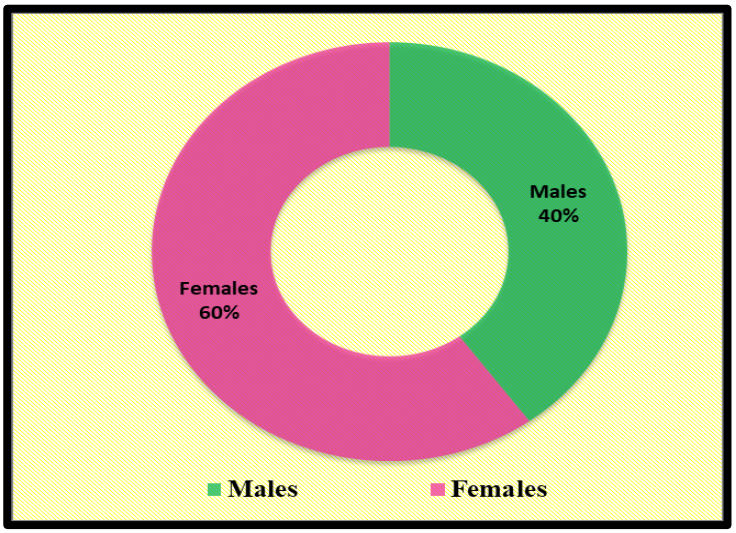

Figure 7: Gender Representation

Source: Primary Survey (2023)

Figure 7 shows the gender ratio i.e., 60% females and 40% males from the 500 respondents during the survey. Mostly women were present in the houses when a survey was conducted.

7.2 Perception level about a leading disaster: Cybercrime

Everyone is using the internet nowadays. Internet has become a source of hackers which they use to commit crimes. Hackers target mostly vulnerable groups of society for example less educated men, homemaker women and mostly teenagers. Most people are aware of this kind of crime but they do not know the preventive measures. They need to take it before using the internet or after getting stuck on the net. People click any link and use any website for money transactions, easily trust any person for buying accommodation etc. Educated as well as uneducated both are vulnerable to cybercrimes. However, the risks associated with uneducated people are more as they are likely to fall easy prey to cybercrimes.

7.3 Awareness of Cybercrime and Sustainability

Almost 92% of people are aware of cybercrimes. They have faced types of cybercrimes in real life for example child grooming, online harassment, bullying etc. People share their experiences. They also share the precautions that people need to take during this kind of situation.

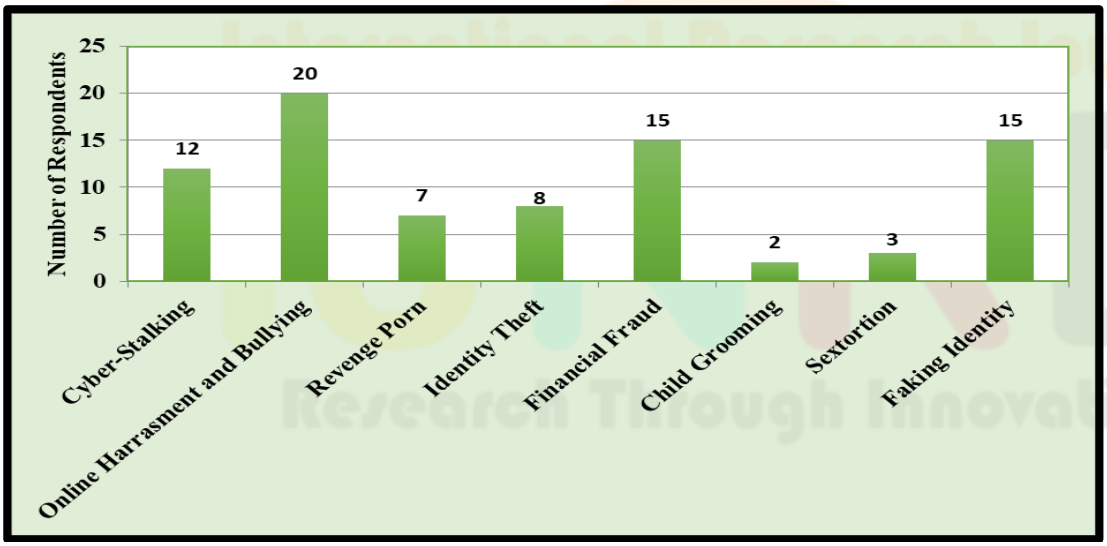

Figure 8: Incidents of crime among residents of Palam colony

Source: Primary Survey (2023)

Figure 8 illustrates the most common cybercrimes encountered by individuals in their daily lives. These include cyber-stalking and bullying, financial fraud, and identity theft. Child grooming and sextortion are the least prevalent. Residents have experienced various cybercrimes, such as fraudulent reverse mortgage and loan offers, pressuring the elderly to pay upfront for services from unregistered contractors, creating credit cards in victims' names or stealing money from their accounts, charging for fraudulent or unnecessary services using elderly victims Medicaid or Medicare information, targeting serious with a get-rich-quick pyramid scheme, or claiming they've won a contest or lottery. They also receive international calls from various phone numbers.

Regarding security measures, about 76% of people are aware of sustainability and cybersecurity practices. Most do not share their OTP and avoid clicking on unknown links and messages. Approximately 60% of respondents have child security and antivirus software installed on their devices. While they are aware of cybersecurity, they lack extensive knowledge on how to make it more sustainable to counteract its negative effects.

7.4 Social Media as a Tool for Education

Social media offers numerous benefits across various aspects of personal, professional and social life. Social media platforms allow people to stay connected with friends, family, and colleagues regardless of geographical distances. Social media serves as a source of real-time news and information. It allows users to stay updated with current events, trends and the tropics of the internet. Professional networking platforms like Linked, In help individuals connect with industry peers, potential employers and mentors, facilitating career growth and opportunities.

Social media fosters the creation and growth of communities around shared interests, hobbies and causes, providing a sense of belonging and support. Businesses leverage social media for making and branding, reaching a wider audience, engaging with customers and promoting products and services effectively. There are lots of opportunities on these platforms to gather so much information. Social Media also help in the mitigation of disasters. Social media spreads news all over the world quickly and it also helps to do online courses and get education on online platforms. The pie chart below shows different percentages of different social media platforms in sustainable disaster mitigations.

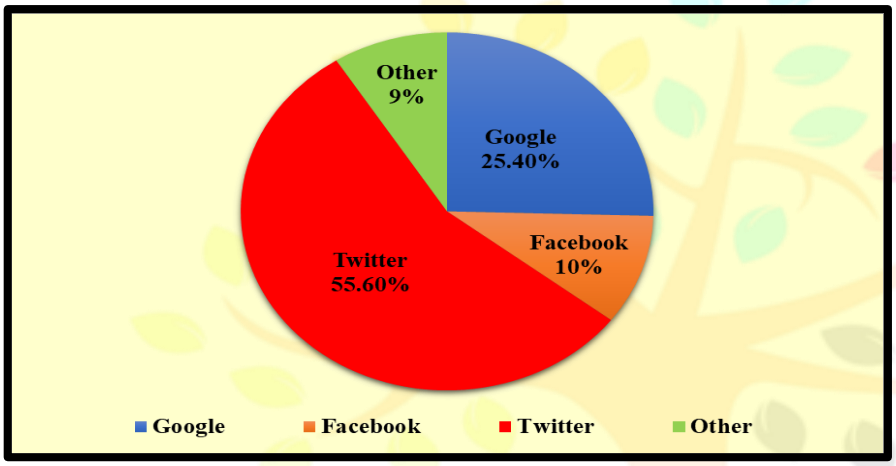

Figure 9: Social Media Platforms in Sustainable Disaster Mitigation

Source: Primary Survey (2023)

Figure 9: Efforts to explain possible sustainable disasters through cybersecurity have highlighted the role of social media platforms. The distribution of these platforms is as follows: Twitter accounts for 55.6%, Google for 25.4%, Facebook for 10%, and other social media platforms like Instagram, WhatsApp, and Telegram collectively account for 9%.

7.5 Sustainable Preventive Measures

Based on the preceding discussion, it is widely recognised that cybercrime is a significant threat in today's tech-savvy world, necessitating effective control measures due to its potential to cause numerous hazards. This issue can be addressed through the adaptation of sustainable preventive measures via cybersecurity. Cybersecurity is crucial in mitigating the effects of digital disasters and protecting personal and private information from unauthorized access. Various types of cybersecurity, such as network security, application security, cloud security, and IoT security, help safeguard our personal, professional, and financial details. These measures also aid in preserving our reputation and improving data management.

However, some software that claims to provide cybersecurity may steal our data. To protect ourselves from such fraud, it is essential to remain aware and vigilant when using digital platforms. We should verify information from authentic sources and connect only with reliable sites for digital updates. Additionally, using secure networks and websites is imperative.

8. MAJOR FINDINGS

- Social media plays a vital role in academics and education.
- Respondents are aware of threats related to cybercrime posed through the internet and media but are ignorant of the measures to tackle them safely.
- There exists a multitude of educator platforms that contain a lot of information.
- The younger generations are more dependent and are inclined to social media.
- Lack of awareness level about sustainable use and mitigation measures of cyber security.

9. SUGGESTIONS

Social media is very helpful in academic fields and students use social media in various ways like to understand concepts, to practice mock tests, find the solutions of textbook answers etc. But in the era of lots of information available on interest, the

students do not always find the relevant data. It is important to take certain measures to ensure that one uses social media effectively and responsibly for academic purposes. Here are some key measures to be considered.

- **Choose the Right Platforms:** Select social media platforms relevant to your academic fields and goals. For, example, researchers may find platforms like Research Gate and Academia.edu more suitable, while educators may use platforms like LinkedIn and Twitter for professional networking and sharing educational content.
- **Privacy Settings:** Review and adjust your privacy settings to control who can see your content and personal information. Limit the sharing of personal details and be cautious about accepting friend or connection requests from unknown individuals.
- **Professional Profile:** Create a professional and informative profile highlighting your academic achievements, research interests, and affiliations. Use a professional profile picture.
- **Filter Content:** Use social media tools and features to filter and prioritise content. Follow relevant hashtags, accounts, or groups, to streamline your feed and focus on content of interest.
- **Be Mindful of Data Privacy:** When sharing personal data or research findings, be aware of data privacy regulations and ethics. Protect sensitive data and obtain necessary permissions for data sharing.

By following these measures, we can harness the potential of social media for academic purposes while maintaining a professional and responsive online presence.

10. SUSTAINABLE SOLUTIONS FOR CYBERSECURITY

There are many sustainable solutions to achieve cybersecurity as listed below:

- **Green Cybersecurity Practices:** These practices investigate sustainable and energy-efficient practices in the field of cybersecurity. It tends to analyse and propose green solutions as to how an organization can reduce their carbon footprint while maintaining robust cybersecurity defences.
- **Data Centre efficiency:** This measure explores the sustainability initiatives within data centres, as they are essential for hosting critical online services and are often targeted by cybercriminals. It calls for rigorous research as to how data centres can optimize energy usage while enhancing security.
- **Environmental implication of Cybersecurity Hardware:** these methods assess the environmental impacts of manufacturing using and disposing of cybersecurity hardware, such as firewalls and intrusion detection systems. They add to environmental sustainability by proposing eco-friendly alternatives.
- **Cybersecurity and Renewable Energy Integration:** There exists a unique integration between cybersecurity and renewable energy systems. They focus on studies to raise public awareness about the environmental consequences of cybercrime and the ways through which it can influence behaviour.

11. CONCLUSION

Social media has emerged as an omnipresent force in modern society, transcending geographical boundaries and catering to the diverse interests of individuals worldwide. Its role as a digital technology and contemporary tool not only facilitates social interaction but also ensures that users remain updated with the latest information and trends. In a world where physical distances can sometimes feel insurmountable, social media serves as a vital link, connecting people from all walks of life. With an astounding 490 million users in 2020, a significant leap from 180 million, the influence of social media continues to grow exponentially, permeating various aspects of our lives. From political discourse to social activism, and educational resources to economic opportunities, social media has become an integral part of our daily existence.

However, amidst the myriad benefits of social media, there exists a palpable threat posed by cybercrime, particularly in digital hubs like Delhi. The alarming statistic of 966 reported cybercrime cases in India in 2011 underscores the urgent need for robust cybersecurity measures. As we navigate the complexities of the digital landscape, safeguarding personal and professional data becomes paramount.

Against this backdrop, our study centred on the Palam Colony in New Delhi, seeks to unravel the intricate dynamics between social media, cybersecurity, and disaster management. While existing research has provided valuable insights, significant gaps remain in understanding the nuanced impact of social media on different age groups and in formulating comprehensive strategies for sustainable cybersecurity. Through a meticulous analysis of both primary and secondary data, our study sheds light on the perceptions, awareness levels, and educational potential of social media. By identifying these critical areas, we try to pave the way for informed policymaking and proactive interventions to mitigate the risks associated with cyber threats.

In our pursuit of a safer digital future, we advocate for a holistic approach that harnesses the power of social media in education while fortifying cybersecurity through sustainable practices. By addressing these pressing concerns, we aspire to cultivate a more resilient and connected society, equipped to navigate the evolving landscape of the digital age with confidence and foresight.

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